Access and Participation Statement

2024/2025

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Revision history

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1.0	06/09/2023	Alice Ship	Update to Statement following 2023 entry
1.0	29/09/2023	Alice Ship	Approved by Council
1.1	15/12/2023	Tim Jee	Update to access aspirations and reformatting.
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Version	Date issued	Action	Name, job title
1.0	29/09/2023	A	Council members

C=Contributor, R=Reviewer, A=Authoriser

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1.0 Access and participation

At the Dyson Institute, our Vision is to develop the best engineers in the world who will pioneer technologies and radical new designs that shape the future of engineering and innovation.

Whilst offering a free education demonstrates our support in removing a financial barrier to participation, we are also committed to improving access for students from underrepresented backgrounds. We believe that pioneering technologies and radical new designs will come from the interaction of engineers with a range of diverse backgrounds. This document outlines our approach to fulfilling our ambition.

2.0 Access

As a small provider, we must set aspirations that are appropriate to our scale and focus. We are also mindful of the fact that pursuing degree level study alongside work does not suit everyone; our admissions process is designed to recruit candidates who are more likely to thrive in this demanding environment; applicants who are passionate problem solvers and can demonstrate attributes such as persistence, as well as high academic capability. To support access from all backgrounds, the Admissions team provide information and guidance ahead of each admissions stage on what to expect and how to prepare.

The Dyson Institute is focused on three key underrepresented areas for access and participation for both the undergraduate programme and MSc launched in 2024:
– Students from low socio-economic backgrounds
– Students who are legally female
– Students from minority ethnic groups or backgrounds

2.1 Students from a low socio-economic background

The Higher Education and Research Act 2017 requires HE institutions to address the underrepresentation from low socio-economic backgrounds in higher education. With a joining fund bursary to support relocation, free tuition and a salary included in the offer we should be accessible to those from this background.

Currently, 20% (OfS[1]) of undergraduates in the UK are eligible for FSM and 24% of all school students are eligible for FSM (23% in state secondary schools[2]). We aspire to recruit 25% from this background for 2025, to mirror the UK level of eligibility for free school meals.

[1] A statistical overview of higher education in England
[2] Government education statistics

We have previously used POLAR4 data is one indication of educational disadvantage. Our ambition was to increase the number of students we recruit from the lowest quintiles:
– 10% of new admissions from POLAR4 Q1
– 20% of new admissions from POLAR4 Q1 + Q2

In 2021 we admitted our highest percentage of Q1 + Q2 applicants to date: 15%. This decreased to 11% in 2022, however in 2023 we have met this with 10% from Q1 and 20% from Q1 + Q2 – our highest proportion to date.

Due to challenges with the societal measure of POLAR4, in 2023 we moved to using the individual measures of eligibility for free school meals and low-income benefits, to establish socio-economic background. Our aspiration was to see 20% of joiners to be eligible for either of these metrics as a representation of a lower socio-economic background.

In 2023, we exceeded this aspiration with 25% of joiners eligible for either free school meals (15%) or low-income benefits (23%). Previously, our highest has been 9% for free school meals in 2020 and 7% for low-income benefits in 2022.

For 2024 entry we saw an increase in applicants from lower socio-economic backgrounds with the inclusion of targeted outreach and contextual admissions support. Whilst the proportion of joiners decreased to 17% across all programmes, we continue to aspire to a 25% representation of students from lower socio-economic backgrounds.

2.2 Female students

The Dyson Institute is passionate about increasing the number of female students pursuing engineering. We ensure positive and aspirational role models, such as female engineers, academics, undergraduates and other professionals, are included in both our recruitment activity and our admissions process.

According to data from EngineeringUK, only 12% of engineers are female[3]. Whilst our aspiration for 2022 entry was to enrol 40% of female undergraduates, to maintain the progress made in 2021, our intake has decreased slightly over the past three years, to 35% in 2022, 25% in 2023, and rising to 31% in 2024. Whilst this is still significantly higher than the female engineering population at UK universities in 2022/23 (21% according to HESA data), we maintain our aspiration in 2025 to reach 40% to reflect the proportion of females studying A Level maths (39%[4]).

2.3 Students from minority ethnic group or background

With our desire to have a diverse student community and diversity of thought and experience in product development, our ambition remains to enrol at least 30% of our cohort from a minority ethnic group or background. This is to match the sector average, as set in 2022; according to HESA data 29% of UK undergraduate students enrolled on engineering courses in 2020/2021 were from this background.

[3] https://www.engineeringuk.com/media/1691/gender-disparity-in-engineering.pdf
[4] https://www.wisecampaign.org.uk/analysis-of-2021-a-level-core-stem-entrants/

However, this representation does not continue into industry with only 9% of UK engineers from this background, compared to 12% of the UK's workforce[5].

We have made good progress on the number of applicants from a minority ethnic background but have only seen a small increase in joiners: from 21% in 2021 and 2022, to 23% in 2023 and now 31% in 2024. We aspire to maintain this representation in 2025.

To date, all Institute graduates from a minority ethnic background have stayed within the industry, having transitioned to a permanent engineering role within Dyson.

[5] https://raeng.org.uk/blogs/racial-parity-in-engineering-looking-beyond-black-history-month

3.0 Outreach & Partnerships

Outreach events are planned throughout the year with current students playing a vital role, sharing their personal stories from their education and work lives and conveying their passion for engineering. Our outreach activity specifically targets areas and schools that will support our access aspirations, including key stakeholders to the student journey such as parents/guardians and teachers/careers advisors. As such, we collaborate with a number of organisations and support initiatives that align with our aspirations to see more females move into engineering, and to see increased representation of students from minority ethnic and/or lower socio-economic backgrounds within Higher Education.

3.1 The James Dyson Foundation

The James Dyson Foundation (JDF) is a registered charity whose mission is to get young people excited about engineering. It does this by providing free educational resources, delivering engineering workshops in schools and offering bursaries. Through our partnership with the JDF, we reach their network of secondary schools, further education and sixth form colleges. Their outreach activity is prioritised on providers that meet some (or all) of the following criteria:

– Be co-educational or girls' schools
– Be state funded
– Have students from a socially diverse background (based on POLAR4 and ethnicity of local population).

4.0 Success and Progression

4.1 Success

Four cohorts (149 students) have graduated from the undergraduate programme. From across these four cohorts, two students left the programme to follow different (non-engineering) studies, and five dropped back a year due to personal circumstances. All graduates achieved an honours degree, and all have moved into full time employment. The Dyson Institute will continue to monitor student success and provide support to ensure all learners can achieve their best.

4.2 Progression

Dyson Institute students are also Dyson Technology Ltd employees, and work in the company's Research and Development (R&D) department for an average of three days a week during their degree programme, putting academic theory into practice in the workplace. They participate in rotations across different areas of engineering, allowing them to experience a range of disciplines and develop the skills they need to be effective in the workplace.

Upon graduation, Dyson Technology offers a permanent role to all Institute graduates who achieve a satisfactory level of performance. All graduates have received a permanent job offer at Dyson Technology Ltd.

5.0 Student support

We are committed to offering our students a supportive and stretching environment in which they can thrive personally as well as academically, as they prepare to become the engineering leaders of the future.

5.1 Academic Support

Our small class sizes allow us to provide individual support to every student. Students are assigned an Academic Tutor who checks on their academic progress, provides advice when needed and can guide them in choosing specialisms. The academic team provides study skill seminars, facilitating the transition to higher level study.

5.2 Student Support Advisors (SSAs)

Each student has access to a Student Support Advisor (SSA), who is the first port of call for support. SSAs hold regular individual meetings with the undergraduates assigned to them, supporting and coaching them to become resilient, confident individuals enhancing their effectiveness as both a student and employee. SSAs are also available to postgraduate students to provide support, coaching and signpost to further support as required.

The student support team also run Wellbeing and Development days throughout the year to further enhance both professional and personal development. SSAs also the first port of call for students who may face difficulties and they work closely with the safeguarding team where specialist support is required.

5.3 Mental Health Support

We all face challenges in our lives, and that is perfectly normal, however, we sometimes struggle with facing those challenges. As well as providing a wealth of self-help resources, including CBT through SilverCloud, we partner with four key mental health support providers for our undergraduates to support them in responding to these challenges whilst maintaining their wellbeing.

- Online talking therapy in partnership with ProblemShared.
- Online Text Support in partnership with SHOUT.
- In-person talking therapy with a clinical psychologist from StableFocus.
- Mental health support through their BUPA medical insurance, as a Dyson employee.

5.4 Disability Support

The SSA's support students with their disability and learning difference needs and ensure the necessary reasonable adjustments are made. They, alongside Dyson HR, provide advice and support to both current and prospective students on the availability and provision of different adjustments available in both academic teaching and workplace learning, helping our students to achieve their full potential. The Dyson Institute provides a wide range of assistive technology is provided to further support for those with disabilities and/or learning differences and takes a proactive approach in making the experience as accessible as possible for all students.

5.5 Year One Induction

Fully aware of the challenges this important life transition poses, we provide a comprehensive induction programme that supports students to transition into employment and higher education. The induction period also includes a social programme and peer mentoring, designed to facilitate the cohort settling in and building community.

Appendix 1

The make-up of the new student body is broken down below. These statistics provide a benchmark against which to improve access and participation at the Dyson Institute.

	Characteristic	% Cohort 1 2017	% Cohort 2 2018	% Cohort 3 2019	% Cohort 4 2020	% Cohort 5 2021	% Cohort 6 2022	% Cohort 7 2023	% 2024 intake
Gender	Male	73%	60%	67%	76%	59%	65%	75%	69%
	Female (Proportion of female undergraduate students studying Engineering & Technology in UK HE, based on HESA data from 2020/21 entry for 2020 onwards)	27%	40%	33%	24% (20%)	41% (20%)	35% (19%)	25%	31%
Ethnicity	From a BAME background (Proportion of BAME undergraduate students studying Engineering & Technology in UK HE, based on HESA data from 2019/20 entry for 2020 onwards)	21% (25%)	20% (26%)	24% (28%)	27% (29%)	21% (29%)	21% (31%)	23%	31%
Disability	Specific disability or learning difference	9%	5%	9%	9%	36%	19%	18%	25%
Education	State educated (State selective)	82% (42%)	78% (30%)	84% (33%)	80% (24%)	79% (38%)	81% (23%)	85% (30%)	75% (13%)
POLAR4	POLAR4 Q1	3%	0%	5%	3%	5%	2%	10%	9%
	POLAR4 Q1+2	12%	13%	12%	9%	15%	12%	20%	17%
Parental Education	Parents completed higher education	58%	45%	79%	62%	62%	79%	80%	87%
	Unsure if parents completed higher education	18%	32%	0%	3%	2%	2%	-	4%
	Parents did not complete higher education	24%	23%	21%	35%	36%	19%	20%	9%
Free School Meals	Eligible for free school meals	-	-	-	9%	8%	7%	15%	9%
Low-income benefits	Eligible for low-income benefits	-	-	-	6%	5%	7%	23%	13%